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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/407,915	09/29/1999	MATTHEW B. SQUIRE	2204/191	3365

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EXAMINER
MIRZA, ADNAN M

ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 03/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/407,915	SQUIRE ET AL.	
	Examiner	Art Unit	
	Adnan M Mirza	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 1999* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-70* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-70* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 1 rejected under 35 U.S.C. 103(a) as being unpatentable over Monot (U.S. 5,708,778) and further in view of Li et al (U.S. 6,012,088).

As per claim 1, Monot discloses a method of configuring a first network device for connection to a communications network subnet having a second network device, the method comprising: determining, with a configuration determination module of the first network device (col. 2, lines 10-40), configuring the first network device, with an auto configuration module of the first network device, accordingly to the configuration attributes so that the first network device is operably connected to the subnet (col. 2, lines 41-63).

However Monot failed to disclose configuration attributes for operably connecting the first network device to the subnet based on configuration information for the subnet detected by the first network device. In the same field of endeavor Li disclosed Some of this customer information comes from the customer itself (e.g., a desired domain name), while some information is generated by the ISP itself(e.g., the IP address block) (col. 9, lines 52-55). The configuration file contains all of the configuration needed by the customer to configure his Internet access device for the customer desired level of service (col. 9, lines 57-59).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated configuration attributes for operably connecting the first network device to the subnet based on configuration information for the subnet detected by the first network device as taught by Li in the method Monot to be able to configure the existing infrastructure of the Network in order to retrieve configuration data from any location.

3. Claims1-6,15-20,30-34,43-48,57-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (U.S. 5,838,907) and further in view of Li et al. (U.S. 6,012,088).

As per claim1, Hansen teaches a method of configuring a first network device for connection to a communications network subnet having a second network device, the method comprising: determining, with a configuration determination module of the first network device (col. 2, lines 39-67), configuration attributes for operably connecting the first network device to the subnet based on configuration information for the subnet detected by the first network device (col. 15, lines 5-18). Hansen does not explicitly disclose configuring the first network device, with an auto configuration module.

However, Li teaches configuring the first network device, with an auto configuration module of the first network device, accordingly to the configuration attributes so that the first network device is operably connected to the subnet (col. 3, lines 23-67).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate an auto configuration module to a communications network in the method of Hansen to increase the efficiency of the network by reducing the down time in the network.

4. As per claim 29 Hansen-Li disclosed a computer network having at least one sub network, the at least one sub network having a plurality of data routers that communicate data packets over the network, the sub network including at least one auto configuring data router, the at least one auto configuring data router comprising: a configuration determination module that determines configuration attributes for operably connecting the auto configuring data router to the subnet based on configuration information for the subnet detected by the auto configuring data router (Hansen, Fig. 1A, col. 4, lines 48-67, col. 5, lines 1-35 & col. 15, lines 5-18); auto configuration module that configures the auto configure data router according to the configuration attributes so that the auto configuring data router is operably connected to the subnet (Li, Fig. 1, element 10, col. 4, lines 46-67, col. 5, lines 1-23 & col. 9, lines 11-26).

5. Regarding claims 2, 16, 30, 44, 58, Hansen-Li taught configuring the first network device automatically by the auto configure module (Li, col. 3, lines 46-61).

6. Regarding Claims 3, 17, 31, 45, 59, Hansen-Li taught configuring the first network device as a guided process in which the auto configuration module interacts with user and presents to the user suggested configuration choices based on the configuration attributes (Li, col. 9, lines 26-59).

7. Regarding claims 4, 18, 32, 46, 60, Hansen-Li taught accompanying configuration choices by an explanation to the user as to why the configuration choices have been suggested (Li, col. 9, lines 13-25).

8. Regarding claims 5, 19, 33, 47, 61, Hansen-Li taught configuration attributes comprise an Internet Protocol (IP) subnet mask determined based upon the configuration information unique to the subnet and derived from passively listening to router control traffic detected by the first

network device at interfaces between the first network device and the subnet (Li, col. 3, lines 46-61).

9. Regarding claims 6, 20, 34, 48, 62, Hansen-Li taught configuration attributes comprise at least one of Dynamic Host Configuration Protocol (DHCP) forwarding data and DHCP server address (Li, col. 15, lines 60-66).

10. Claims 7-14, 21-28, 35-42, 49-56, 63-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (U.S. 5,838,907) in view of Li et al. (U.S. 6, 012, 088), and further in view of Reichmeyer et al. (U.S. 6, 286, 038).

Regarding claims 7, 21, 35, 49, 63, Hansen-Li- Reichmeyer taught configuration attributes comprises virtual local area network (VLAN) information including tag identifications, types, protocols, addresses, and port-to-VLAN mappings (col. 7, lines 20-31).

Hansen and Li fail to disclose the VLAN information as configuration attributes.

It would have been obvious to one having ordinary skill in the art at the time of the invention was made incorporated the VLAN information as configuration attributes in the methodology of Hansen and Li to increase the efficiency of the networking method by making it more diversified.

11. Regarding claims 8, 22, 36, 50, 64 Hansen-Li- Reichmeyer taught configuration attributes comprise at least one of the Spanning Tree Group information, Simple Network Management Protocol (SNMP) server addresses (Reichmeyer, col. 4, lines 44-50). OSPF, RIP and VRRP are well know routing protocols in routing configuration of a router and according to Network working group RFCs Open Shortest Path First (OSPF) timer information (RFC 1583),

Routing Information Protocol (RIP) broadcast timer information (RFC 2453), and Virtual Router Redundancy Protocol (VRRP) information (RFC 2338) are very well explained.

12. Regarding claims 9, 23, 37, 51, 65, Hansen-Li- Reichmeyer taught wherein the step of determining configuration attributes further comprises communicating with a network centralized configuration server (Li, col. 10, lines 6-16).

13. Regarding claims 10, 24, 38, 52, 66, Hansen-Li-Reichmeyer taught configuring network centralized server using Simple Network Management Protocol (SNMP) to communicate (Reichmeyer, col. 4, lines 44-50).

14. Regarding claims 11, 53, 67, Hansen-Li-Reichmeyer taught wherein the step of communicating with a network centralized configuration server comprises: sending to the centralized configuration server a message containing addresses of network neighbours on the subnet (Reichmeyer, Fig. 3, col. 5, lines 26-67); searching in a configuration database of the centralized configuration server for configuration attributes relevant to the first network device (Reichmeyer, col. 6, lines 66-67 & col. 7, lines 1-10); and forwarding the configuration attributes from the configuration database to the first network device (Reichmeyer, col. 6, lines 36-42).

15. Regarding claims 12, 26, 40, 54, 68, Hansen-Li-Reichmeyer taught wherein the step of determining configuration attributes further comprises communicating with the second network device (Hansen, col. 2, lines 39-67)

16. Regarding claims 13, 27, 41, 55, 69, it is well known in the art of networking according to networking group RFCs that wherein the step of communicating with the second network device using a protocol based on Internet Control Message Protocol (ICMP) (RFC 1885) or User

Datagram Protocol (UDP) (RFC 1240). In the field of networking ICMP and UDP are very common networking protocols and very well explain according to Networking group RFCs.

17. Regarding claims14, 28, 42, 56, 70, Hansen-Li-Reichmeyer taught wherein the step of determining configuration attributes comprises analyzing routing protocol control packets be detected by first Network device (col. 15, lines17-67 & col. 16, lines 1-4).

18. Regarding claims 25, 39, Hansen-Li-Reichmeyer taught configuration determination module receives relevant configuration attributes from the centralized configuration server (Reichmeyer, Fig. 6,col. 10, lines 26-67).

Applicant's arguments are as follows:

19. Applicant's arguments filed 01/02/03 have been fully considered but they are not persuasive.

20. Applicant argued that prior art did not disclose determining configuration attributes for operably connecting the first network device to the subset based on configuration information for the subnet detected by the first network device.

As to applicants argument Li disclosed Li disclosed Some of this customer information comes from the customer itself (e.g., a desired domain name), while some information is generated by the ISP itself(e.g., the IP address block) (col. 9, lines 52-55). The configuration file contains all of the configuration needed by the customer to configure his Internet access device for the customer desired level of service (col. 9, lines 57-59).

21. Applicant argued that the probe, however does not involve detecting configuration information for the network, only the parameters which should be used by the terminal to operate with the network.

As to applicants argument one ordinary skill in the art can understand that word probing in the field of networking can be described as detecting configuration information for the network.

22. Applicant argued about the obviousness rejection related to references Hansen, Li and Monot.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

23. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Adnan Mirza whose telephone number is (703)-305-4633.

24. The examiner can normally be reached on Monday to Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703)-308-5221. The fax for this group is (703)-746-7239.

25. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)-746-7239 (For Status Inquiries, Informal or Draft Communications, please label "PROPOSED" or "DRAFT");

(703)-746-7239 (For Official Communications Intended for entry, please mark "EXPEDITED PROCEDURE"),

(703)-746-7238 (For After Final Communications).

26. Any Inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

Any response to a final action should be mailed to:

BOX AF

Commissioner of Patents and Trademarks Washington, D.C.20231

Or faxed to:

Hand-delivered responses should be brought to 4th Floor Receptionist, Crystal Park II, 2021 Crystal Drive, Arlington, VA 22202.

Adnan Mirza

Examiner

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100